Response to Amendment

This office action is in response to the amendment filed on 03/17/2010.

Claims 8, 10-12, 20-25 and 27-30, are pending for examination. Claims 8, 20 and

25 have been amended. Claims 1-7, 9, 13-19, 26 and 31-36 have been canceled.

Telephone Interview

A telephone interview has been conducted between applicant's representative

(Mr. Joseph Oriti) and the examiner (Susan Chen) on 06/09/2010 as attached copy.

During the interview, the examiner indicated that the amendment filed on 03/17/2010

overcome the double patenting rejection on record, thereby, the examiner withdrew the

double patenting rejection on record. However, the amendment filed on 03/10/2010 has

ambiguous issues which might lead to the 35 U.S.C. 112, second paragraph rejection.

Applicant representative indicated that he will amend the claims to incorporate the

novelty features from the specification for instant application and resolve the ambiguous

issues of the amendment dated on 03/17/2010.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with applicant attorney (Mr. Joseph Oriti) on June 16, 2010.

For the amendment filed on 03/17/2010, please amend the following:

1-7   (Canceled)

8.   (Previously Presented) A database system for storing data including

Extensible Markup Language (XML) instances, said database system comprising:

a computer processor; and

a computer readable storage medium having a tangible physical structure, the

tangible medium having program code that causes said processor to perform a plurality

of operations, said operations comprising:

generating an XML schema collection [[a]] container in a relational

database for collecting a plurality of XML schema namespace universal resource

identifiers (URIs), each namespace URI respectively ~~uniquely~~ identifying a single

collection of element types and attribute names ~~by identifying a location of a schema~~

~~document corresponding to and defining the uniquely~~ in an XML instance that

corresponds to a location typed XML schema document ~~identified collection of the~~

~~namespace, each namespace URI thereby specifying a schema for any of a plurality of~~

~~XML instances conforming to said schema document, each XML instance having a set~~

~~of XML data conforming to the schema specified by a namespace URI;~~ wherein, the

XML schema document defines the namespace URIs in the container and a set of

attributes, relationships, organizations, and functions for confirming with the XML

instance; and each namespace URI in the container allows a reference to any XML

schema document in the system;

placing in the created container at least two XML schema namespace

universal resource identifiers (URIs) which represent at least two different location typed

SQL server namespace schemas in the relational database;

~~validating an XML instance according to a schema document identified by~~

~~at least one of said namespace URIs;~~

~~storing a validated XML instance in a database column; and~~

~~associating the column with the container to ensure that the XML instance stored in the~~

~~associated column and any other XML instance stored in the associated column~~

~~conforms to the schema of any of the at least two of the XML schema namespace URIs~~

~~in the container, wherein said associating includes validating any XML instances~~

~~existing in said database column prior to said associating~~ validating a single complex

namespace schema for a redefined XML instance by calling an import function specified

in the redefined XML instance with at least one of the two location typed schemas that

were placed in the container by the respective URIs;

associating a column of a table in another database with the XML schema

collections container prior to the validating operation, by setting the location type of the

column in the table of the other database in context of the single complex namespace

schema for the redefined XML instance, with any other XML schemas being placed in

the container when referencing respective URLs;

storing the validated single complex name space schema for the redefined

XML instance within the column of the container when invoking an alter XML schema

collection function specified by the redefined XML instance that adds the validated

single complex name space schema for the redefined XML instance into the column of

the container in a form of the location typed URI.

9-10.   (Canceled)

11.   (Currently Amended) The database system of claim 8, said computer

readable storage medium further comprising program code executable by said

computer processor that comprises an include function which assembles URIs identified

in a plurality of schema location attributes.

12.   (Previously Presented) The database system of claim 8, said computer

readable storage medium further comprising program code executable by said

processor that comprises an alter function which adds schema components to XML

schema namespaces within said container.

13-19. (Canceled)

20.   (Currently Amended) A <u>computer</u> processor-implemented method of validating Extensible Markup Language (XML) instances to be stored in a column of a relational database, said method comprising:

creating, via the processor, <u>an XML schema collection</u> [[a]] container <u>in the relational database</u> for <u>collecting</u> a plurality of XML schema namespaces, each XML schema namespace respectively <s>uniquely</s> identifying a <u>single</u> collection of element type and attribute names <u>in an XML instance</u> by having a URI (Uniform Resource Identifier) <s>uniquely</s> identifying a location <u>typed XML</u> <s>of a</s> schema document <u>which corresponds to the XML instance</u> <s>corresponding to and defining the uniquely identified collection of the namespace, each namespace URI thereby specifying a schema for any of a plurality of XML instances conforming to said schema document, each XML instance having a set of XML data conforming to the schema specified by an XML schema namespace;</s> <u>,wherein, the XML schema document defines the namespaces URIs in the container and a set of attributes, relationships, organizations, and functions for confirming with the XML instance; and each namespace URI in the container allows a reference to any XML schema document in the relational database;</u>

placing in the created container at least two XML schema namespace URIs <u>which represent at least two different location typed SQL server namespace schemas in the relational database;</u>

<u>redefining a customized XML instance that contains an include function which allows an assembling of XML schema document components to construct a single complex namespace schema for the redefined XML instance;</u>

validating the single complex namespace schema for the redefined XML instance

by calling an import function specified in the redefined XML instance with at least one of

the two location typed schemas that were placed in the container by the respective

URIs;

~~associating a column of a relational database with said container to ensure that~~

~~any XML instance stored in the associated column conforms to the schema of any of~~

~~the at least two of the XML schema namespace URIs in the container, wherein said~~

~~associating includes ensuring that any XML instances existing in said column prior to~~

~~said associating conform to at least one schema document identified by a namespace~~

~~URI in said container;~~

~~ensuring, prior to storing a particular XML instance in said column, that the~~

~~particular XML instance conforms to the schema of one of said XML schema~~

~~namespace URIs in the container; and~~

~~storing said particular XML instance in said column upon so ensuring~~ associating

a column of a table in another database with the XML schema collection container prior

to the validating operation, by setting the location type of the column in the table of the

other database in context of the single complex namespace schema for the redefined

XML instance, with any other XML schemas being placed in the container when

referencing respective URLs;

storing the validated single complex name space schema for the redefined XML

instance within the column of the container when invoking an alter XML schema

collection function specified by the redefined XML instance that adds the validated

single complex name space schema for the redefined XML instance into the column of

the container in a form of the location typed URI.

21.   (Canceled)

22.   (Previously Presented) The method of claim 20, further comprising

assembling respective namespaces for a plurality of schema location attributes.

23.   (Previously Presented) The method of claim 20, further comprising adding

schema components to XML schema namespaces within said container for XML

schema namespaces.

24.   (Cancel)

25.   (Currently Amended) A computer readable storage medium having a

tangible physical structure, the tangible medium comprising computer readable modules

having computer executable instructions for interfacing with a storage location for

storing XML instances in a computing system, the modules comprising:

computer readable instructions for collecting a plurality of XML schema

namespaces in a container for XML schema namespaces,

each XML schema namespace URI respectively uniquely identifying a collection

of element type and attribute names by identifying a location of a schema each XML

schema namespace respectively uniquely identifying a collection of element type and

attribute names by having a URI (Uniform Resource Identifier) uniquely identifying a

location of a schema document corresponding to and defining the uniquely identified

~~collection of the namespace, each namespace URI thereby specifying a schema for any~~

~~of a plurality of XML instances conforming to said schema document, each XML~~

~~instance having a set of XML data conforming to the schema specified by an XML~~

~~schema namespace, each XML schema namespace being represented in the container~~

~~by the URI thereof;~~

~~computer readable instructions for associating a column of a relational database~~

~~with said container to ensure that any XML instance stored in the associated column~~

~~conforms to the schema of any of the at least two of the XML schema namespace URIs~~

~~in the container, wherein said associating includes validating that any XML instances~~

~~existing in said column prior to said associating conform to at least one schema~~

~~document identified by a namespace URI in said container;~~

~~computer readable instructions for validating prior to storing an XML instance in~~

~~said column that the XML instance conforms to the schema of one of said XML schema~~

~~namespace URIs in the container; and~~

~~computer readable instructions for storing said XML instance is in said database~~

~~column upon so ensuring~~ generating an XML schema collection container in a relational

database to collect a plurality of XML schema namespace universal resource identifiers

(URIs), each namespace URI respectively identifying a single collection of element

types and attribute names in an XML instance which corresponds to a location typed

XML schema; wherein, the XML schema document defines the namespace URIs in the

container and a set of attributes, relationships, organizations, and functions for

confirming with the XML instance; and each namespace URI in the container allows a reference to any XML schema document in the storage medium;

placing in the created container at least two XML schema namespace universal resource identifiers (URIs) which represent at least two different location typed SQL server namespace schemas in the relational database;

redefining a customized XML instance that contains an include function which allows an assembling of XML schema document components to construct a single complex namespace schema for the redefined XML instance;

validating the single complex namespace schema for the redefined XML instance by calling an import function specified in the redefined XML instance with at least one of the two location typed schemas that were placed in the container by the respective URIs;

associating a column of a table in another database with the XML schema collections container prior to the validating operation, by setting the location type of the column in the table of the other database in context of the single complex namespace schema for the redefined XML instance, with any other existed XML schemas being placed in the container when referencing respective URLs;

storing the validated single complex name space schema for the redefined XML instance within the column of the container when invoking an alter XML schema collection function specified by the redefined XML instance that adds the validated

single complex name space schema for the redefined XML instance into the column of the container in a form of the location typed URI.

26-27. (Canceled)

28.   (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that assemble namespaces for a plurality of schema location attributes.

29.   (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that adds schema components to XML schema namespaces within at least one of said one or more containers for XML schema namespaces.

30-36. (Canceled)

Allowable Subject Matter

Claims 8, 11-12, 20, 22-23, 25 and 28-29, are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 8, 20 and 25, are allowable because the prior art on record or that encountered in searching for the invention, fail to disclose or suggest the features of instant invention – an relational XML schema collection container which collects at least two different location typed SQL server schema that were stored in form of namespace

URI for validating a single complex namespace schema of a redefined XML instance by calling an import function specified in the redefined XML instance with at least one of the two location typed schemas that were placed in the container by referencing the respective URIs; associating the complex namespace schema for the redefined XML instance with the SQL server namespace schema and any other XML schemas being place in the container prior to the validating operation and storing the validated single complex name space schema for the redefined XML instance within the column of the container in form of the location typed URI when invoking an alter XML schema collection function specified by the redefined XML instance in a combination as claimed by applicant.

Claims 11-12, 22-23 and 28-29 depend on claims 8, 20 and 25, hence are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUSAN Y. CHEN whose telephone number is (571)272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mofiz Apu can be reached on 571-272-4080. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Susan Y Chen/
Examiner
Art Unit 2161

June 16, 2010